

U.S. Application No. 10/671,718

**REMARKS****RECEIVED  
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The Applicants request reconsideration of the rejection.

Claims 1, 3-4, 6-7, 9-10, 12-16 and 18-19 remain pending.

Claims 1-20 stand rejected under 35 U.S.C. §101 as failing to claim an invention that produces a useful, concrete, and tangible result. The independent claims have been amended to add certain subject matter previously claimed dependently, such that it is believed that the rejection under §101 has been overcome.

Claims 13 and 15 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for the reasons set forth on page 3 of the Office Action. The Applicants have amended these claims to positively recite the noted steps.

Claims 1-20 also stand rejected under 35 U.S.C. §102(b) as being anticipated by Caudill et al., U.S. Patent No. 6,766,316 (Caudill). The Applicants traverse as follows.

Referring to claim 1, the document search method acquires a seed text which is inputted as the search condition, partitions an object document into a plurality of blocks, and calculates the similarity of each block to the seed text. The Office Action considers these steps to correspond to Caudill's description of making queries, converting predicate structure of a document into numerical vectors, and comparing an overall pattern of the document predicate structures to the query. However, whereas the claimed seed text may find correspondence with Caudill's query, partitioning an object document into blocks does not correlate to converting predicate structures of the document (already sub-parts of the document) into numerical vectors, since numerical vectors do not correspond to blocks of the object document. Further, the claimed step of calculating similarity of each block of the object

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document to the seed text would have to be met by calculating the similarity of each numerical vector to the query of Caudill, which is not asserted. Moreover, the overall pattern of predicate structures in the document does not correlate to each block of the object document, such that comparing the overall pattern to the query does not correlate with calculating the similarity of each block to the seed text.

Continuing, claim 1 requires a step of judging whether or not the calculated similarity of each block satisfies a predetermined condition. The Office Action relates this step to Caudill's comparison of two predicate structures, returning a similarity measure. However, the passage from line 18 – line 35 describes multiple components of a relevancy ranking unit that perform different levels of similarity comparison, only one of which is culled to make the rejection. Further, the claimed judging step does not compare two structures of the object document, but rather judges whether an already-calculated similarity satisfies a predetermined condition.

Claim 1 has been amended to recite a step of calculating a similarity of the object document as a whole to the seed text, based on the calculated similarity of each block to the seed text. That is, the plural calculated similarities of the plural blocks determine the similarity calculated for the document as a whole. Caudill does not perform such a similarity calculation of the object document as a whole to the seed text, based on the calculated similarity of individual blocks to the seed text. In Caudill's terms, Caudill does not determine similarity of the document as a whole to the query based on the calculated similarity of each predicate structure to the query.

As rejected, claim 1 recited a step of calculating, as an inclusion degree, a ratio of blocks that are judged as satisfying the condition to the whole of the plurality of blocks of the object document. The inclusion degree is different from the similarity of the object document as a whole to the seed text, calculated in the newly-claimed

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calculating step. Against the inclusion degree calculating step, the Office Action cites Caudill as teaching that the relevance of the document to a query is determined by calculating the similarity coefficient based on the structures of each pair of query predicates and document predicates. There is no ratio in this determination, however, and certainly no ratio of condition-satisfying predicate structures to the whole of the predicate structures of the object document, which would be required by Caudill to meet the claimed step.

Finally, the outputting step of claim 1 has been amended to output a list of information of object documents in association with the inclusion degree of each listed object document and with the similarity of each listed object document as a whole to the seed text. That is, a list of information of object documents is output in association with each listed document's inclusion degree and similarity calculated in the newly-added calculating step. See, for example, Figs. 5-7 of the present application, wherein Fig. 6 displays the documents in order of inclusion degree, and Fig. 7 displays only those documents that satisfy an minimum inclusion degree. Caudill does not disclose or suggest to output a list of information of the object documents including the inclusion degree and similarity of the document as a whole, as required by the amended claim.

Each of the remaining independent claims has been amended similarly to claim 1, and thus the foregoing arguments apply equally to those claims. The Applicants note, however, that each of the independent claims has a different scope, and thus the incorporation by reference of the above arguments should not be construed as a statement that the patentability of the other independent claims stands or falls with that of claim 1, or that the scope of protection sought for such independent claims is equal to that of claim 1.

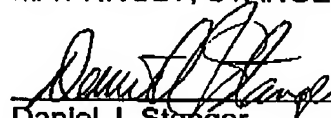
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In view of the foregoing amendments and remarks, the Applicants request reconsideration of the rejection and allowance of the claims.

To the extent necessary, Applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of Mattingly, Stanger & Malur, P.C., Deposit Account No. 50-1417 (referencing attorney docket no. 500.43154X00).

Respectfully submitted,

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